

Universal symbolic handwriting recognition system

FC Carman - US Patens 5,454,046, 1995 - Google Patents
 ... **TREE NODE 386 CREATE AND VISIT DOWN SEARCH TREE NODE 388 ... 410 PERFORM**
PARSER-LEVEL RECOGNITION 428 416 WORD CONFIRMATION 430 420 ... 5,454,046 10 20
UNIVERSAL SYMBOLIC HANDWRITING RECOGNITION SYSTEM TECHNICAL FIELD The ...
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Incremental system for real time digital ink analysis

S Raghunathy, MM Shiman, Z Wei ... - US Patent App, 10 ... , 2002 - Google Patents
 ... **O5 CO Mark Changed Nodes in Snapshot as Parser Dirty Appropriately Rewrites Doc Tree Based**
 on ... follow these instructions: parse errors or other errors when the **electronic ink**
 is presented to an associated handwriting recognition system, thereby ...
[Cited by 1](#) - [Related articles](#) - [All 3 versions](#)

Finger mouse and gesture recognition system as a new human computer interface

BK Ko ... - Computers & Graphics, 1997 - Elsevier
 ... group at IBM constructed a spreadsheet application that combines gesture and handwriting [4].
 Buxton's ... Figure 9 shows a decision tree for the set of gestures of our example ... **Eager recognition**
 results to 4. **FIGURE DRAW-AN EXAMPLE GESTURE-BASED APPLICATION FDraw ...**
[Cited by 24](#) - [Related articles](#) - [B1, D1, etc.](#) - [All 2 versions](#)

Incremental system for real time digital ink analysis

S Raghunathy, MM Shiman, Z Wei ... - US Patent App. ... , 2002 - freepatentsonline.com
 ... and methods according to the invention may relate to an overall **electronic ink** processing system ...
 Similarly, if the parser engine 1308 is a **handwriting recognition** system 310, the output may ... As
 noted above, however, the user 1300 may change the document **tree** data structure ...
[Cached](#)

[PDF] The thesis of Ching-Wei Chen is approved.

E Chang ... - 2001 - Gatescor
 ... multiple letters, and groups of several words, to be treated as one unit for **handwriting**
recognition ... previously completed strokes, and uses its **proprietary recognition** engine to decide
 what was written. ... Figure 6 provides a **snapshot** of PenOffice in action. ...
[Related articles](#) - [View as HTML](#) - [All 3 versions](#)

[\[PDF\] from psu.edu](#)**Evolutionary learning of modular neural networks with genetic programming**

SB Cho ... - Applied Intelligence, 1996 - Springer
 ... 5(b). Mutation: Mutation changes each **tree node** to a new **node** in proportion to the mutation
 rate. ... The network is constructed as 100 × 20 × 10, where the number of hidden **nodes**, 20, has
 been ... Workshop Frontiers in **Handwriting Recognition**, Montreal, Canada, 1990, pp. ...
[Cited by 38](#) - [Related articles](#) - [B1, D1, etc.](#) - [All 6 versions](#)

[\[PDF\] from yonsei.ac.kr](#)**Ink divider and associated application program interface**

S Dodge, A Gounares, AJ Goldberg ... - US Patent App, 10/ ... , 2003 - Google Patents
 ... **Classification Analysis 314 Annotation Drawings /306 Writing Normalization /308 Handwriting**
Recognition 310 Lines ... faces where, for example, users can input and interact with **electronic ink**
 on a ... for ease of use, compatibility, making possible improved handwriting recognition ...
[Cited by 5](#) - [Related articles](#) - [All 3 versions](#)

Recognition of handwritten similar Chinese characters by neural networks

HC Fu ... - Networks for Signal Processing [1996] VI ... , 1996 - IEEE Explore IEEE.org
 ... output 01 (denoted as "N"), if the **D-node** outputs is lower than Thd, and the **S-node** output is ...
 Figure 7: The decision **tree** in the MUXNET ... classifier **recognition** systems, in the proceedings
 of of the fourth inter- national workshop on frontiers in **handwriting recognition** (IWFHR-IV ...
[Cited by 2](#) - [Related articles](#) - [All 2 versions](#)

Data clustering: a review

AK Jain, MN Murty ... - ACM computing surveys (CSUR), 1999 - portal.acm.org
 ... an increasing in- terest in the use of clustering methods in **pattern recognition** [Anderberg 1973 ...
 of var- ious clustering algorithms for construct- ing the minimal spanning tree and the ... Michalski
 and Stepp (1983) which are represented as trees, where the parent **node** represents a ...
[Cited by 1,130](#) - [Related articles](#) - [B1, D1, etc.](#) - [All 187 versions](#)

[\[PDF\] from psu.edu](#)**Ink divider and associated application program interface**

S Dodge, A Gounares, AJ Goldberg ... - US Patent App. ... 2003 - freepatentsonline.com
 ... and methods according to examples of this invention may be used with pen-based computing
 systems that accept and process **electronic ink** and ink ... 3), and the other is a **recognition** engine
 408 (which may conduct, for example, **handwriting recognition** analysis 310 and/or ...
[Cached](#)

(PDF) Off-line Omni-style Handwriting Arabic Character Recognition System Based on Wavelet Compression

AA Abuoras. - Arab Research Institute in Sciences & ... 1994 - Citeseer

... The tree is known as a filter bank as depicted in Fig. 2 At each level, the signal is decomposed into low and high frequencies. ... Page 5. Off-line Omni-style Handwriting Arabic Character Recognition System Based on Wavelet Compression 127 FIG. ...

Cited by 5 - Related articles - View as HTML - All 4 versions

[\[PDF\] from psu.edu](#)**Reduction of non deterministic automata for hidden Markov model based pattern recognition applications**

F Moore, F Watheba. - AI 2003. Advances in Artificial Intelligence, 2003 - Springer

... Most on-line cur-sive handwriting recognition systems use a lexical constraint to help improve the ... In storage can be obtained simply by using a trie (a well known tree-like data ... have worked on similar problems with Finite State Automata (FSA) for Automatic Speech Recognition. ...

Cited by 5 - Related articles - Related - All 10 versions

[\[PDF\] from psu.edu](#)**Distance features for neural network-based recognition of handwritten characters**

IS Oh. - Journal of Document Analysis and Recognition, 1993 - Springer

... From the tree structures, character models for each class are constructed so that they can be ... Since a neural network architecture requires a fixed number of input nodes, the numerical ... 1. The evaluation is performed in the specific domain of handwriting recognition by the neural ...

Cited by 55 - Related articles - All 3 versions

[\[PDF\] from jku.ac.kr](#)**Incremental system for real time digital ink analysis**

S Raghupathy, MM Shilman, Z Wei. - US Patent App. 10/ ... 2002 - Google Patents

... O5 C0 Mark Changed Nodes in Snapshot as Parser Dirty Appropriately Rewrite Doc Tree Based on ... follow these instructions may cause recognition errors or other errors when the electronic ink is presented to an associated handwriting recognition system, thereby ...

Cited by 1 - Related articles - All 3 versions

On the choice of training set, architecture and combination rule of multiple mlp classifiers for multiresolution recognition of handwritten characters

U Bhattacharya, S Vajda, A Mallick, BB Chaudhuri. - 2004 - computer.org

... A wavelet transform is usually implemented by a binary tree of filters. ... Proceedings of the 9th Intl Workshop on Frontiers in Handwriting Recognition (WFHR-9 2004) 0-7695-2187-8/04 \$20.00 ... where wjk(t) is the weight connecting a hidden node j with an output node k while wij(t) ...

Cited by 10 - Related articles - All 3 versions

[\[PDF\] from psu.edu](#)**Method and apparatus for an improved language recognition system**

H Alshawi. - US Patent 5,870,706, 1999 - Google Patents

... Probabilities are assigned as the sum of probabilities of all tree derivations for which words in the candidate string appear as fringe nodes. ... methods are applicable to all modalities of language recognition, including, without limitation, handwriting recognition and optical char ...

Cited by 33 - Related articles - All 2 versions

Incremental system for real time digital ink analysis

S Raghupathy, MM Shilman, Z Wei. - US Patent App. ... 2002 - freepatentsonline.com

... [0042] Systems and methods according to the invention may relate to an overall electronic ink processing system ... and the other is a recognition engine 1308 (which may conduct, for example, handwriting recognition analysis 310 and/or annotation recognition analysis 314 ...

Cached

Electronic ink processing

J Wakeam, R Duncan, B Dresevic. - US Patent App. 10/ ... 2003 - Google Patents

... 24,2005 (54) ELECTRONIC INK PROCESSING (75) Inventors: Jamie Wakeam, Redmond, WA (US); Richard Duncan, Kirkland, WA (US); Bodin Dresevic, Bellevue, WA (US); Kerry Sutanto, Kirkland, WA (US); Sashi Raghupathy, Redmond, WA (US); Timothy H. Kannapel ...

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Ink divider and associated application program interface

S Dodge, A Goumares, AJ Goldberg. - US Patent App. 10/ ... 2003 - Google Patents

... Classification Analysis 314 Annotation Drawings 306 Writing Normalization 308 Handwriting Recognition 310 Lines ... faces where, for example, users can input and interact with electronic ink on a ... for ease of use, compatibility, making possible improved handwriting recognition ...

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(PDF) A rapidly learning interpretation system for on-line cursive handwriting

Q Guan. - 1998 - Citeseer

... The analysis employs pruning of a tree based lexicon. ... boundary of high and middle zones that we have found to be important for both handwriting recognition and learning. ... The idea of describing handwriting as a sequence of feature vectors is widely used; see, for example ...

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